

41. ¹ An apparatus for testing a sample of biologic fluid, said apparatus comprising:
a container that includes:

5 a chamber for quiescently holding the sample during the test;
one or more features operable to enable the testing of the sample, wherein at
least one of the one or more features is positioned at a known spatial location within
the chamber; and

a label containing information which is used in the performance of the one or
more tests on the sample, wherein the information includes the spatial location of the
at least one feature located within the chamber; and

a reader module operable to perform the testing of the sample, wherein the reader
module includes:

a label reader for reading the label, and thereby accessing the information
including the spatial location of the at least one feature located within the chamber;

a field illuminator for selectively illuminating a field of the sample quiescently
residing within the chamber, wherein the sample field has a known or ascertainable
area;

20 an image dissector, for converting an image of light passing through or
emanating from the sample field into an electronic data format useful for test
purposes; and

25 a positioner operable to selectively change the relative position of any or all of
the chamber, the field illuminator, and the image dissector, to enable imaging of a
field of the sample in which the at least one feature at a known spatial location within
the chamber is positioned.

42. ² The apparatus of claim ~~41~~¹, further comprising means for determining one of a
through-plane thickness or a volume of the sample field.

43. ³ An apparatus for testing a sample of biologic fluid, said apparatus comprising:
a container having a chamber for quiescently holding the sample during the test, and
one or more features operable to enable the testing of the sample, wherein at least one of the
one or more features is positioned at a known spatial location within the chamber; and

5 a reader module operable to perform the testing of the sample, wherein the reader
module includes a field illuminator for selectively illuminating a field of the sample
quiescently residing within the chamber during the test, an image dissector for converting an
image of light passing through or emanating from the sample field into an electronic data
format useful for test purposes, and a positioner operable to selectively change the relative
position of any or all of the chamber, the field illuminator, and the image dissector to enable
imaging of the field of the sample in which the at least one feature at a known spatial location
within the chamber is positioned.

44. ³ The apparatus of claim ~~43~~³, further comprising means for determining one of a
through-plane thickness or a volume of the sample field.

45. ⁵ An apparatus for testing a sample of biologic fluid quiescently residing within a
chamber, said apparatus comprising:

20 a field illuminator for selectively illuminating a field of the sample, said field having a
known or ascertainable area;

an image dissector for converting an image of light passing through or emanating from
the field of the sample into an electronic data format useful for test purposes;

25 a positioner operable to selectively change the relative position of any or all of the
chamber, the field illuminator, or the image dissector, thereby enabling selective illumination
of a plurality of the sample fields within the chamber; and

means for determining one of a through-plane thickness or a volume of each sample
field.

46. ^b The apparatus of claim ~~45~~ ⁵ further comprising means for spatially locating the relative positions of any or all of the chamber, the field illuminator, or the image dissector, to enable selective imaging of any particular spatial location within the chamber.

5 47. ⁷ An apparatus for testing a sample of biologic fluid, said apparatus comprising:
a container that includes a chamber for quiescently holding the sample during the test, and one or more features operable to enable the testing of the sample, wherein at least one of the one or more features is positioned at a known spatial location within the chamber;
a field illuminator for illuminating a portion or all of the chamber;
10 an image dissector for converting an image of light passing through or emanating from the sample into an electronic data format useful for test purposes; and
means for determining one of a through-plane thickness or a volume of each sample field.

48. ⁸ A method for testing a sample of biologic fluid, comprising the steps of:
providing a container for holding the sample, the container having one or more features operable to enable the testing of the biologic fluid sample, at least one of which features is located at a known spatial location within the chamber;
20 depositing the sample within the chamber, wherein the sample quiescently resides in the chamber thereafter during the test;
providing a field illuminator for selectively illuminating a portion, or all, of the sample within chamber;
selectively imaging a portion or all of the illuminated sample, and thereby creating an image of the illuminated sample;
25 identifying a portion of the image aligned with the at least one feature located at a known spatial location within the chamber.

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49. ⁹ A method for testing a sample of biologic fluid, comprising the steps of:
providing a container for holding the sample, said container having a chamber with a first wall and a transparent second wall;
providing one or more features operable to enable the testing of the sample, wherein at
5 least one of the features is located at a known spatial location within the chamber;
depositing the sample within the chamber, wherein the sample thereafter quiescently resides in the chamber during the test;
providing a reader module that includes a field illuminator for selectively illuminating a portion or all of the sample disposed in the chamber, and an image dissector;
10 selectively change the relative position of any or all of the chamber, the field illuminator, or the image dissector to enable selective imaging of one or more sample fields within the chamber aligned with the one or more features at known spatial locations;
selectively imaging the one or more sample fields that contain the one or more features.

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